

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2004/016330

A. CLASSIFICATION OF SUBJECT MATTER Int.Cl ⁷ C07D311/30, A61K31/352, 31/7048, 35/78, A61P3/04, 3/10, 43/00, A23L1/30 According to International Patent Classification (IPC) or to both national classification and IPC				
B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) Int.Cl ⁷ C07D311/30, A61K31/352, 31/7048, 35/78, A61P3/04, 3/10, 43/00, A23L1/30 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) CAPLUS (STN), CAOLD (STN), REGISTRY (STN), MEDLINE (STN), BOSIS (STN), EMBASE (STN)				
C. DOCUMENTS CONSIDERED TO BE RELEVANT				
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.		
X	JP 5-236910 A (Nippon Flour Mills, Co., Ltd.), 17 September, 1993 (17.09.93), Full text; particularly, Claims; Par. No. [0002] (Family: none)	1-7		
X	JP 09143070 A (Nippon Flour Mills, Co., Ltd.), 03 June, 1997 (03.06.97), Full text; particularly, Claims; Par. Nos. [0001] to [0004] (Family: none)	1-7		
X	JP 2002-80362 A (Kao Corp.), 19 March, 2002 (19.03.02), Full text; particularly, Claims; Par. Nos. [0001], [0034] (Family: none)	1-7		
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.				
<table border="0"> <tr> <td> * Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed </td> <td> "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "&" document member of the same patent family </td> </tr> </table>			* Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "&" document member of the same patent family
* Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "&" document member of the same patent family			
Date of the actual completion of the international search 07 December, 2004 (07.12.04)		Date of mailing of the international search report 28 December, 2004 (28.12.04)		
Name and mailing address of the ISA/ Japanese Patent Office		Authorized officer		
Facsimile No.		Telephone No.		

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International application No.

PCT/JP2004/016330

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	JP 9-176010 A (Kureha Chemical Industry Co., Ltd.), 08 July, 1997 (08.07.97), Full text; particularly, Claims; Par. Nos. [0001], [0012], [0017], [0041] (Family: none)	1-4, 6
X	JP 2002-524480 A (Korea Institute of Science and Technology), 06 August, 2002 (06.08.02), Full text; particularly, Claims & WO 00/15174 A2 & US 6096364 A & EP 1113791 A2 & KR 2000019716 A & KR 2001015494 A & CN 1322132 A	1-4, 6
X	JP 2001-233768 A (BASF AG.), 28 August, 2001 (28.08.01), Full text; particularly, Claims & EP 1127572 A1 & US 2001/0046963 A1 & CN 1318371 A	1-4, 6
X	NURALIEV, Yu. N. et al., The Efficacy of Quercetin in Alloxan Diabetes, Enksperimental'naya Klin Farmakol, 1992, Vol.55, No.1, pages 42 to 44	1-4, 6
X	ISHIKAWA, Keiko et al., Effect of Flavonoids on the Differentiation of 3T3-L1 Adipocytes, Food.Sci.Techinol.Res., 2001, Vol.7, No.2, pages 154 to 160	1-3, 5, 7
X	KUPPUSAMY, U.R. et al., Potentiation of β -Adrenoceptor Agonist-Mediated Lipolysis by Quercetin and Fisetin in Isolated Rat Adipocytes, Biochemical Pharmacology, 1994, Vol.47, No.3, pages 521 to 529	1-3, 5, 7
X	JP 7-61927 A (Lotte Co., Ltd.), 07 March, 1995 (07.03.95), Full text; particularly, Claims; Par. Nos. [0001], [0029] (Family: none)	1-3, 5, 7
X	JP 10-95732 A (Nippon Flour Mills, Co., Ltd.), 14 April, 1998 (14.04.98), Full text; particularly, Claims; Par. Nos. [0010], [0024] (Family: none)	1-3, 5, 7
X	JP 2000-344673 A (Nippon Flour Mills, Co., Ltd.), 12 December, 2000 (12.12.00), Full text; particularly, Claims (Family: none)	1-3, 5, 7

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International application No.

PCT/JP2004/016330

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Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	JP 2-163067 A (Kenji NAKAJIMA), 22 June, 1990 (22.06.90), Full text; particularly, Claims; page 3 (Family: none)	4-8
X	JP 2003-128571 A (Matsuura Yakugyo Kabushiki Kaisha), 08 May, 2003 (08.05.03), Full text; particularly, Claims (Family: none)	4, 6, 8
X	JP 2003-113100 A (Pola Chemical Industries Inc.), 18 April, 2003 (18.04.03), Full text; particularly, Par. Nos. [0008], [0011], [0028] (Family: none)	5, 7, 8
X	JP 8-198769 A (Pola Chemical Industries Inc.), 06 August, 1996 (06.08.96), Full text; particularly, Claims (Family: none)	5, 7, 8
A	WASSEL, G. et al., Flavonoids of Nelumbo nucifera Gaertn and Biological Evaluation, Egypt.J.Pharm.Sci., 1996, Vol.37, No.1 to 6, pages 585 to 596	1-8
A	WEYER, Christian et al., Development of β_3 -Adrenoceptor Agonists as Antiobesity and Antidiabetes Drugs in Humans: Current Status and Future Prospects, Drug Development Research, 2000, Vol.51, pages 80 to 93	1-8
A	DE SOUZA, Christopher J. et al., Beta ₃ -Adrenoceptor Agonists as Anti-diabetic and Anti-obesity Drugs in Humans, Current Pharmaceutical Design, 2001, Vol.7, pages 1433 to 1449	1-8
P,X	JP 2004-141163 A (Kabushiki Kaisha Ryukyu Bio Resouce Kaihatsu), 20 May, 2004 (20.05.04), Full text; particularly, Claims; Par. Nos. [0006], [0018] (Family: none)	1-7
E,X	JP 2004-307365 A (Kao Corp.), 04 November, 2004 (04.11.04), Full text; particularly, Claims (Family: none)	5, 7, 8

A. 発明の属する分野の分類 (国際特許分類 (I P C))

Int. Cl¹ C07D311/30, A61K31/352, 31/7048, 35/78, A61P3/04, 3/10, 43/00, A23L1/30

B. 調査を行った分野

調査を行った最小限資料 (国際特許分類 (I P C))

Int. Cl¹ C07D311/30, A61K31/352, 31/7048, 35/78, A61P3/04, 3/10, 43/00, A23L1/30

最小限資料以外の資料で調査を行った分野に含まれるもの

国際調査で使用了電子データベース (データベースの名称、調査に使用した用語)

CAPLUS (STN), CAOLD (STN), REGISTRY (STN), MEDLINE (STN), BIOSIS (STN), EMBASE (STN)

C. 関連すると認められる文献

引用文献の カテゴリー*	引用文献名 及び一部の箇所が関連するときは、その関連する箇所の表示	関連する 請求の範囲の番号
X	JP 5-236910 A (日本製粉株式会社) 1993. 09. 17, 全文、特に、特許請求の範囲、[0002]段落 (ファミリーなし)	1-7
X	JP 09143070 A (日本製粉株式会社) 1997. 06. 03, 全文、特に、特許請求の範囲、[0001] - [0004]段落 (ファミリーなし)	1-7

☒ C欄の続きにも文献が列挙されている。☐ パテントファミリーに関する別紙を参照。

* 引用文献のカテゴリー

「A」特に関連のある文献ではなく、一般的技術水準を示すもの

「E」国際出願日前の出願または特許であるが、国際出願日以後に公表されたもの

「L」優先権主張に疑義を提起する文献又は他の文献の発行日若しくは他の特別な理由を確立するために引用する文献 (理由を付す)

「O」口頭による開示、使用、展示等に言及する文献

「P」国際出願日前で、かつ優先権の主張の基礎となる出願

の日の後に公表された文献

「T」国際出願日又は優先日後に公表された文献であって出願と矛盾するものではなく、発明の原理又は理論の理解のために引用するもの

「X」特に関連のある文献であって、当該文献のみで発明の新規性又は進歩性がないと考えられるもの

「Y」特に関連のある文献であって、当該文献と他の1以上の文献との、当業者にとって自明である組合せによって進歩性がないと考えられるもの

「&」同一パテントファミリー文献

国際調査を完了した日

0 7 . 1 2 . 2 0 0 4

国際調査報告の発送日

28.12.2004

国際調査機関の名称及びあて先

日本国特許庁 (I S A / J P)

郵便番号 1 0 0 - 8 9 1 5

東京都千代田区霞が関三丁目 4 番 3 号

特許庁審査官 (権限のある職員)

新 留 素 子

4 P

2 9 3 9

電話番号 0 3 - 3 5 8 1 - 1 1 0 1 内線 3 4 9 0

C (続き) . 関連すると認められる文献		
引用文献の カテゴリー*	引用文献名 及び一部の箇所が関連するときは、その関連する箇所の表示	関連する 請求の範囲の番号
X	JP 2002-80362 A (花王株式会社) 2002. 03. 19, 全文、特に、特許請求の範囲、[0001]、[0034]段落 (ファミリーなし)	1-7
X	JP 9-176010 A (呉羽化学工業株式会社) 1997. 07. 08, 全文、特に、特許請求の範囲、[0001]、[0012]、[0017]、[0041]段落 (ファミリーなし)	1-4, 6
X	JP 2002-524480 A (コリア インスティテュート オブ サイエンス アンド テクノロジー) 2002. 08. 06, 全文、特に、特許請求の範囲 & WO 00/15174 A2 & US 6096364 A & EP 1113791 A2 & KR 2000019716 A & KR 2001015494 A & CN 1322132 A	1-4, 6
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X	JP 2003-128571 A (松浦薬業株式会社) 2003. 05. 08, 全文、特に、特許請求の範囲 (ファミリーなし)	4, 6, 8
X	JP 2003-113100 A (ポーラ化成工業株式会社) 2003. 04. 18, 全文、特に、特許請求の範囲、[0008]、[0011]、[0028]段落 (ファミリーなし)	5, 7, 8
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E X	JP 2004-307365 A (花王株式会社) 2004. 11. 04, 全文、特に、特許請求の範囲 (ファミリーなし)	5, 7, 8